

## REMARKS

In the Office Action, the sole pending claim 20 has been allowed. However, the Patent Office has requested a new sequence listing based on proposed changes to the previously-submitted sequence listing and drawings that references sequences therein as recited in Applicants' amendment filed on August 19, 2002.

In response, Applicants are submitting herewith a copy of a substitute sequence listing (Exhibit 1) that includes the changes to the sequences as discussed above. Applicants note for the record that the proposed changes have been accepted by the Patent Office as indicated in the Office Action dated November 21, 2003 on page 2. Applicants note that a print copy of the substitute sequence listing is attached herewith and further that an amendment directing its entry into the specification has been made as previously discussed. Applicants further note that they are concurrently submitting herewith a separate submission of the substitute sequence listing that includes the print copy as submitted herewith in addition to a copy in computer-readable form. Applicants state that the content of the paper and the computer-readable form copies of the substitute sequence listing are the same and further believe that no new matter has been added thereby. Accordingly, Applicants respectfully submit that the requirements pursuant to 37 C.F.R. § 1.821-1.825 have been satisfied.

Applicants note for the record that an Office Action was previously mailed on June 17, 2003 ("Office Action") regarding the above-identified patent application. A copy of the Office Action is attached herewith as Exhibit 2. The Office Action is essentially the same as the Office Action that was submitted on November 21, 2003. In this regard, it is Applicants' understanding that the Applicants are only required to respond to the Office Action dated November 21, 2003 based on a discussion regarding same between Examiner Jennifer Graßer and Thomas C. Basso, the undersigned attorney of record.

However, to the extent that the Office Action is still in effect and thus requires a response thereto, Applicants respectfully submit that this amendment should also be deemed responsive to the Office Action mailed June 17, 2003 and further request that if any fees due in connection with same and this application as a whole be deducted from Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. (113190-064) on the account statement.

For the foregoing reasons, Applicants believe that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY 

Thomas C. Basso  
Reg. No. 46,541  
P.O. Box 1135  
Chicago, Illinois 60690-1135  
Phone: (312) 807-4310

Dated: December 17, 2003

# SEQUENCE LISTING

<110> Irvin, Randall T.  
Hodges, Robert S.

<120> Pseudomonas Treatment Composition and Method

<130> 0113190-00064

<140> US 09/865,159

<141> 2003-03-01

<150> US 09/329,884

<151> 1999-06-11

<150> US 60/089,155

<151> 1998-06-12

<160> 22

<170> PatentIn version 3.1

<210> 1

<211> 387

<212> DNA

<213> Pseudomonas aeruginosa

<400> 1

gcgctcgagg	gtaccgaatt	cgcacgcgct	cagcttagcg	aacgcatgac	cctggccagt	60
ggtctcaaga	cgaaagtgag	cgatatcttc	tctcaggatg	ggtcctgccc	ggctaatact	120
gctgccacgg	caggcatcga	gaaagatacc	gacatcaacg	gcaagtatgt	tgccaaggta	180
acaactgggtg	gcaccgcagc	tgcgctctggt	ggttgcaacta	tcgttgctac	tatgaaagcc	240
tctgatgtgg	ctactcctct	gagggggaaa	actctgactt	tgactctagg	aaatgctgac	300
aagggttctt	acacttgggc	ctgtacttcc	aacgcagata	acaagtacct	gccaaaaacc	360
tgccagactg	ctaccactac	cactccg				387

<210> 2  
<211> 129  
<212> PRT  
<213> Pseudomonas aeruginosa

<400> 2

Ala Leu Glu Gly Thr Glu Phe Ala Arg Ala Gln Leu Ser Glu Arg Met  
1 5 10 15  
Thr Leu Ala Ser Gly Leu Lys Thr Lys Val Ser Asp Ile Phe Ser Gln  
20 25 30  
Asp Gly Ser Cys Pro Ala Asn Thr Ala Ala Thr Ala Gly Ile Glu Lys  
35 40 45  
Asp Thr Asp Ile Asn Gly Lys Tyr Val Ala Lys Val Thr Thr Gly Gly  
50 55 60  
Thr Ala Ala Ala Ser Gly Gly Cys Thr Ile Val Ala Thr Met Lys Ala  
65 70 75 80  
Ser Asp Val Ala Thr Pro Leu Arg Gly Lys Thr Leu Thr Leu Thr Leu  
85 90 95  
Gly Asn Ala Asp Lys Gly Ser Tyr Thr Trp Ala Cys Thr Ser Asn Ala  
100 105 110  
Asp Asn Lys Tyr Leu Pro Lys Thr Cys Gln Thr Ala Thr Thr Thr Thr  
115 120 125

Pro

<210> 3  
<211> 369  
<212> DNA  
<213> Pseudomonas aeruginosa

<400> 3

gcgctcgagg gtaccgaatt cgctcggtcg gaaggcgcat ctgctcttgc ttcggtcaat  
60  
ccgttgaaga ctaccgttga agaggcgctt tctcgtgggt ggagcgtgaa gagcgggtaca  
120  
ggtacagagg acgctactaa gaaagaggtt cctctggggg tggcggcaga tgctaacaaa  
180  
ctgggtacta tcgcactcaa acccgatcct gctgatggta ctgcagatat cactttgact  
240  
ttcactatgg gcggtgcagg accgaagaat aaagggaata ttattaccct gactcgtact  
300  
gcagctgatg gtctctggaa gtgcaccagt gatcaggatg agcagtttat tccgaaaggt  
360  
tgctctagg  
369

<210> 4  
 <211> 123  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 4

Ala Leu Glu Gly Thr Glu Phe Ala Arg Ser Glu Gly Ala Ser Ala Leu  
 1 5 10 15

Ala Ser Val Asn Pro Leu Lys Thr Thr Val Glu Glu Ala Leu Ser Arg  
 20 25 30

Gly Trp Ser Val Lys Ser Gly Thr Gly Thr Glu Asp Ala Thr Lys Lys  
 35 40 45

Glu Val Pro Leu Gly Val Ala Ala Asp Ala Asn Lys Leu Gly Thr Ile  
 50 55 60

Ala Leu Lys Pro Asp Pro Ala Asp Gly Thr Ala Asp Ile Thr Leu Thr  
 65 70 75 80

Phe Thr Met Gly Gly Ala Gly Pro Lys Asn Lys Gly Lys Ile Ile Thr  
 85 90 95

Leu Thr Arg Thr Ala Ala Asp Gly Leu Trp Lys Cys Thr Ser Asp Gln  
 100 105 110

Asp Gln Gln Phe Ile Pro Lys Gly Cys Ser Arg  
 115 120

<210> 5  
 <211> 366  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 5

gcgctcgagg gtaccgaatt cgcgcggttcg gaaggtgctt cggcgctggc gacgatcaac 60  
 ccgctgaaga ccactgttga agagtcgctg tcgctggaa ttgctggtag caaaattaaa 120  
 attggtacta ctgcttctac tgcgaccgaa acatatgccg gcgtcgagcc ggatgccaac 180  
 aagttgggtg taattgctgt agcaatcgaa gatagtgggtg cgggtgatat tacctttacc 240  
 ttccagactg gtacctctag tccaagaat gctactaaag ttatcactct gaaccgtact 300  
 gcggatgggg tctgggcttg taaatctacc caggatccga tgttcactcc gaaagggtgt 360  
 gataac 366

<210> 6  
 <211> 122  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 6

Ala	Leu	Glu	Gly	Thr	Glu	Phe	Ala	Arg	Ser	Glu	Gly	Ala	Ser	Ala	Leu
1				5					10					15	
Ala	Thr	Ile	Asn	Pro	Leu	Lys	Thr	Thr	Val	Glu	Glu	Ser	Leu	Ser	Arg
			20					25					30		
Gly	Ile	Ala	Gly	Ser	Lys	Ile	Lys	Ile	Gly	Thr	Thr	Ala	Ser	Thr	Ala
		35					40					45			
Thr	Glu	Thr	Tyr	Ala	Gly	Val	Glu	Pro	Asp	Ala	Asn	Lys	Leu	Gly	Val
	50					55					60				
Ile	Ala	Val	Ala	Ile	Glu	Asp	Ser	Gly	Ala	Gly	Asp	Ile	Thr	Phe	Thr
65					70					75				80	
Phe	Gln	Thr	Gly	Thr	Ser	Ser	Pro	Lys	Asn	Ala	Thr	Lys	Val	Ile	Thr
				85					90					95	
Leu	Asn	Arg	Thr	Ala	Asp	Gly	Val	Trp	Ala	Cys	Lys	Ser	Thr	Gln	Asp
			100					105					110		
Pro	Met	Phe	Thr	Pro	Lys	Gly	Cys	Asp	Asn						
		115					120								

<210> 7  
 <211> 381  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 7

gcgctcgagg	gtaccgaatt	cgcccgtagc	caggtgaccc	gtgccgtgag	tgaagtcagc	60
gcgctgaaga	ccgctgcgga	gtcggcgatt	ctggaagggg	aggagattgt	ttccagcgcg	120
actcctaaag	ataccagta	tgacattggc	ttcaccgagt	ctactttgct	agatggttct	180
ggtaagagtc	agatccaggt	aacggacaat	aaagatggca	ccgttgagtt	ggtcgctacc	240
ttgggtaaat	cttctgggtc	cgccatcaaa	ggggctgtaa	tactgtttc	gcgtaaaaat	300
gacggagtct	ggaactgcaa	aatcaccaa	actcctacag	cttggaagcc	caactacgct	360
ccggctaatt	gcccgaattc	c				381

<210> 8  
 <211> 127  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 8

Ala Leu Glu Gly Thr Glu Phe Ala Arg Thr Gln Val Thr Arg Ala Val  
 1 5 10 15  
 Ser Glu Val Ser Ala Leu Lys Thr Ala Ala Glu Ser Ala Ile Leu Glu  
 20 25 30  
 Gly Lys Glu Ile Val Ser Ser Ala Thr Pro Lys Asp Thr Gln Tyr Asp  
 35 40 45  
 Ile Gly Phe Thr Glu Ser Thr Leu Leu Asp Gly Ser Gly Lys Ser Gln  
 50 55 60  
 Ile Gln Val Thr Asp Asn Lys Asp Gly Thr Val Glu Leu Val Ala Thr  
 65 70 75 80  
 Leu Gly Lys Ser Ser Gly Ser Ala Ile Lys Gly Ala Val Ile Thr Val  
 85 90 95  
 Ser Arg Lys Asn Asp Gly Val Trp Asn Cys Lys Ile Thr Lys Thr Pro  
 100 105 110  
 Thr Ala Trp Lys Pro Asn Tyr Ala Pro Ala Asn Cys Pro Asn Ser  
 115 120 125

<210> 9  
 <211> 381  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 9

gcgctcgagg gtaccgaatt ctctcgctct cagggtctcca gggttatggc ggaggctggc 60  
 tccttgaaga ctgcagttga ggcctgcctc caggatggtc gtactgctgt ggggtactgct 120  
 gctgggtcaat gcgatccggg tgcgacgggt tccagtttgt tgactgggtgc ttctcagact 180  
 tctcaaacc tgccaaccaa taccggtgtt ccgcagggtc tggatcctct gactactcaa 240  
 accactatca ttgcgacttt tggtaacggc gcacccgcag ctattttctgg ccagactctg 300  
 acctggactc gtgatgttaa tgggtggctgg agctgtgcta ctaccgtaga tgctaaattc 360  
 cgtcctaata gctgtactga c 381

<210> 10  
 <211> 127  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 10

Ala Leu Glu Gly Thr Glu Phe Ser Arg Ser Gln Val Ser Arg Val Met  
 1 5 10 15

Ala Glu Ala Gly Ser Leu Lys Thr Ala Val Glu Ala Cys Leu Gln Asp  
 20 25 30

Gly Arg Thr Ala Val Gly Thr Ala Ala Gly Gln Cys Asp Pro Gly Ala  
 35 40 45

Thr Gly Ser Ser Leu Leu Thr Gly Ala Ser Gln Thr Ser Gln Thr Leu  
 50 55 60

Pro Thr Asn Thr Gly Val Pro Gln Val Leu Asp Pro Leu Thr Thr Gln  
 65 70 75 80

Thr Thr Ile Ile Ala Thr Phe Gly Asn Gly Ala Ser Ala Ala Ile Ser  
 85 90 95

Gly Gln Thr Leu Thr Trp Thr Arg Asp Val Asn Gly Gly Trp Ser Cys  
 100 105 110

Ala Thr Thr Val Asp Ala Lys Phe Arg Pro Asn Gly Cys Thr Asp  
 115 120 125

<210> 11  
 <211> 507  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 11

gcgctcgagc accatcatca ccatggtggt ggtggcgaga ttgaggccct caaggctgaa	60
atcgaagccc taaaggccga gatagaagca cttaaggcag agatcgaggc gctaaaagcg	120
gaaatagagg ctctgaaggc aggcggtgga ggagaattcg ctcgttcgga aggcgcatct	180
gctcttgctt cggtcaatcc gttgaagact accgttgaag aggcgctttc tctggttggtg	240
agcgtgaaga gcggtacagg tacagaggac gctactaaga aagagggttcc tctgggggtg	300
gcggcagatg ctaacaaact ggttactatc gcactcaaac ccgatacctgc tgatggtact	360
gcagatatca ctttgacttt cactatgggc ggtgcaggac cgaagaataa agggaaaatt	420
attaccctga ctcgtactgc agctgatggt ctctggaagt gcaccagtga tcaggatgag	480
cagttttattc cgaaagggtg ctctagg	507



<210> 12  
 <211> 169  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 12

Ala	Leu	Glu	His	His	His	His	Gly	Gly	Gly	Gly	Glu	Ile	Glu	Ala
1			5				10					15		
Leu	Lys	Ala	Glu	Ile	Glu	Ala	Leu	Lys	Ala	Glu	Ile	Glu	Ala	Leu
		20					25					30		Lys
Ala	Glu	Ile	Glu	Ala	Leu	Lys	Ala	Glu	Ile	Glu	Ala	Leu	Lys	Ala
		35				40						45		Gly
Gly	Gly	Gly	Glu	Phe	Ala	Arg	Ser	Glu	Gly	Ala	Ser	Ala	Leu	Ala
	50					55					60			Ser
Val	Asn	Pro	Leu	Lys	Thr	Thr	Val	Glu	Glu	Ala	Leu	Ser	Arg	Gly
65					70					75				80
Ser	Val	Lys	Ser	Gly	Thr	Gly	Thr	Glu	Asp	Ala	Thr	Lys	Lys	Glu
			85					90						95
Pro	Leu	Gly	Val	Ala	Ala	Asp	Ala	Asn	Lys	Leu	Gly	Thr	Ile	Ala
		100						105					110	Leu
Lys	Pro	Asp	Pro	Ala	Asp	Gly	Thr	Ala	Asp	Ile	Thr	Leu	Thr	Phe
		115				120						125		Thr
Met	Gly	Gly	Ala	Gly	Pro	Lys	Asn	Lys	Gly	Lys	Ile	Ile	Thr	Leu
	130					135					140			Thr
Arg	Thr	Ala	Ala	Asp	Gly	Leu	Trp	Lys	Cys	Thr	Ser	Asp	Gln	Asp
145					150					155				160
Gln	Phe	Ile	Pro	Lys	Gly	Cys	Ser	Arg						
				165										

<210> 13  
 <211> 507  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 13

gcgctcgagc	accatcatca	ccatgggtggt	ggtggcgagg	tatccgcttt	agagaaagaa	60
gtttctgctc	tcgaaaaaga	ggtcagtgct	ctggaaaaag	aggtgtcagc	cttggaagaa	120
gaagtatcag	cacttgagaa	ggcggtgga	ggagaattcg	ctcggtcgga	aggcgcatct	180
gctcttgctt	cggtaaatcc	gttgaagact	accgttgaag	aggcgctttc	tcgtgggttg	240
agcgtgaaga	gcggtacagg	tacagaggac	gctactaaga	aagaggttcc	tctgggggtg	300
gcggcagatg	ctaacaaact	gggtactatc	gcactcaaac	ccgatcctgc	tgatggtact	360
gcagatatca	ctttgacttt	cactatgggc	ggtgcaggac	cgaagaataa	agggaaaatt	420
attaccctga	ctcgtactgc	agctgatggt	ctctggaagt	gcaccagtga	tcaggatgag	480
cagtttattc	cgaaagggtg	ctctagg				507

<210> 14  
 <211> 169  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 14

Ala Leu Glu His His His His His Gly Gly Gly Gly Glu Val Ser Ala  
 1 5 10 15

Leu Glu Lys Glu Val Ser Ala Leu Glu Lys Glu Val Ser Ala Leu Glu  
 20 25 30

Lys Glu Val Ser Ala Leu Glu Lys Glu Val Ser Ala Leu Glu Lys Gly  
 35 40 45

Gly Gly Gly Glu Phe Ala Arg Ser Glu Gly Ala Ser Ala Leu Ala Ser  
 50 55 60

Val Asn Pro Leu Lys Thr Thr Val Glu Glu Ala Leu Ser Arg Gly Trp  
 65 70 75 80

Ser Val Lys Ser Gly Thr Gly Thr Glu Asp Ala Thr Lys Lys Glu Val  
 85 90 95

Pro Leu Gly Val Ala Ala Asp Ala Asn Lys Leu Gly Thr Ile Ala Leu  
 100 105 110

Lys Pro Asp Pro Ala Asp Gly Thr Ala Asp Ile Thr Leu Thr Phe Thr  
 115 120 125

Met Gly Gly Ala Gly Pro Lys Asn Lys Gly Lys Ile Ile Thr Leu Thr  
 130 135 140

Arg Thr Ala Ala Asp Gly Leu Trp Lys Cys Thr Ser Asp Gln Asp Glu  
 145 150 155 160

Gln Phe Ile Pro Lys Gly Cys Ser Arg  
 165

<210> 15  
 <211> 525  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 15

gcgctcgagc	accatcatca	ccatggtggt	ggtggcgaga	ttgaggccct	caaggctgaa	60
atcgaagccc	taaaggccga	gatagaagca	cttaaggcag	agatcgaggc	gctaaaagcg	120
gaaatagagg	ctctgaaggc	aggcgggtga	ggagaattcg	cacgcgctca	gcttagcgaa	180
cgcatgaccc	tggccagtgg	tctcaagacg	aaagtgagcg	atatcttctc	tcaggatggg	240
tctgccccgg	ctaatactgc	tgccacggca	ggcatcgaga	aagataccga	catcaacggc	300
aagtatgttg	ccaaggtaac	aactggtggc	accgcagctg	cgtctggtgg	ttgcactatc	360
gttgctacta	tgaaagcctc	tgatgtggct	actcctctga	gggggaaaac	tctgactttg	420
actctaggaa	atgctgacaa	gggttcttac	acttgggcct	gtacttccaa	cgcagataac	480
aagtacctgc	caaaaacctg	ccagactgct	accactacca	ctccg		525



<210> 18  
 <211> 175  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 18

Ala	Leu	Glu	His	His	His	His	Gly	Gly	Gly	Gly	Glu	Val	Ser	Ala
1			5				10					15		
Leu	Glu	Lys	Glu	Val	Ser	Ala	Leu	Glu	Lys	Glu	Val	Ser	Ala	Leu
		20					25					30		
Lys	Glu	Val	Ser	Ala	Leu	Glu	Lys	Glu	Val	Ser	Ala	Leu	Glu	Lys
		35					40					45		
Gly	Gly	Gly	Glu	Phe	Ala	Arg	Ala	Gln	Leu	Ser	Glu	Arg	Met	Thr
	50					55					60			
Ala	Ser	Gly	Leu	Lys	Thr	Lys	Val	Ser	Asp	Ile	Phe	Ser	Gln	Asp
65					70				75					80
Ser	Cys	Pro	Ala	Asn	Thr	Ala	Ala	Thr	Ala	Gly	Ile	Glu	Lys	Asp
			85					90						95
Asp	Ile	Asn	Gly	Lys	Tyr	Val	Ala	Lys	Val	Thr	Thr	Gly	Gly	Thr
		100						105					110	
Ala	Ala	Ser	Gly	Gly	Cys	Thr	Ile	Val	Ala	Thr	Met	Lys	Ala	Ser
		115					120					125		
Val	Ala	Thr	Pro	Leu	Arg	Gly	Lys	Thr	Leu	Thr	Leu	Thr	Leu	Gly
	130					135					140			
Ala	Asp	Lys	Gly	Ser	Tyr	Thr	Trp	Ala	Cys	Thr	Ser	Asn	Ala	Asp
145					150				155					160
Lys	Tyr	Leu	Pro	Lys	Thr	Cys	Gln	Thr	Ala	Thr	Thr	Thr	Thr	Pro
			165					170						175

<210> 19  
 <211> 504  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 19

gcgctcgagc	accatcatca	ccatggtggt	ggtggcgaga	ttgaggccct	caaggctgaa	60
atcgaagccc	taaaggccga	gatagaagca	cttaaggcag	agatcgaggc	gctaaaagcg	120
gaaatagagg	ctctgaaggc	aggcggtgga	ggagaattcg	cgcgttcgga	aggtgcttcg	180
gcgctggcga	cgatcaaccc	gctgaagacc	actggtgaag	agtcgctgtc	gcgtggaatt	240
gctggtagca	aaattaaaat	tggtagtact	gcttctactg	cgaccgaaac	atatgccggc	300
gtcgagccgg	atgccaaaca	ggtgggtgta	attgctgtag	caatcgaaga	tagtggtgcg	360
ggtgatatta	cctttacctt	ccagactggt	acctctagtc	ccaagaatgc	tactaaagtt	420
atcactctga	accgtactgc	ggatggggtc	tgggcttgta	aatctacca	ggatccgatg	480
ttcactccga	aaggttgtga	taac				504

<210> 20  
 <211> 168  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 20

Ala Leu Glu His His His His His Gly Gly Gly Gly Glu Ile Glu Ala  
 1 5 10 15

Leu Lys Ala Glu Ile Glu Ala Leu Lys Ala Glu Ile Glu Ala Leu Lys  
 20 25 30

Ala Glu Ile Glu Ala Leu Lys Ala Glu Ile Glu Ala Leu Lys Ala Gly  
 35 40 45

Gly Gly Gly Glu Phe Ala Arg Ser Glu Gly Ala Ser Ala Leu Ala Thr  
 50 55 60

Ile Asn Pro Leu Lys Thr Thr Val Glu Glu Ser Leu Ser Arg Gly Ile  
 65 70 75 80

Ala Gly Ser Lys Ile Lys Ile Gly Thr Thr Ala Ser Thr Ala Thr Glu  
 85 90 95

Thr Tyr Ala Gly Val Glu Pro Asp Ala Asn Lys Leu Gly Val Ile Ala  
 100 105 110

Val Ala Ile Glu Asp Ser Gly Ala Gly Asp Ile Thr Phe Thr Phe Gln  
 115 120 125

Thr Gly Thr Ser Ser Pro Lys Asn Ala Thr Lys Val Ile Thr Leu Asn  
 130 135 140

Arg Thr Ala Asp Gly Val Trp Ala Cys Lys Ser Thr Gln Asp Pro Met  
 145 150 155 160

Phe Thr Pro Lys Gly Cys Asp Asn  
 165

<210> 21  
 <211> 504  
 <212> DNA  
 <213> Pseudomonas aeruginosa

<400> 21

gcgctcgagc	accatcatca	ccatggtggt	ggtggcgagg	tatccgcttt	agagaaagaa	60
gtttctgctc	tcgaaaaaga	ggtcagtgct	ctggaaaaag	aggtgtcagc	cttgaaaaag	120
gaagtatcag	cacttgagaa	gggcggtgga	ggagaattcg	cgcgttcgga	aggtgcttcg	180
gcgctggcga	cgatcaaccc	gctgaagacc	actggtgaag	agtcgctgtc	gcgtggaatt	240
gctggtagca	aaattaaaat	tgggtactact	gcttctactg	cgaccgaaac	atatgccggc	300
gtcgagccgg	atgccaaaca	gttggtgtga	attgctgtag	caatcgaaga	tagtggtgcg	360
ggtgatatta	cctttacctt	ccagactggt	acctctagtc	ccaagaatgc	tactaaagtt	420
atcactctga	accgtactgc	ggatggggtc	tgggcttgta	aatctacca	ggatccgatg	480
ttcactccga	aaggttgtga	taac				504





# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,159	05/24/2001	Randall T. Irvin	113190-064	3428

24573 7590 06/17/2003

BELL, BOYD & LLOYD, LLC  
PO BOX 1135  
CHICAGO, IL 60690-1135

EXAMINER

GRASER, JENNIFER E

ART UNIT

PAPER NUMBER

1645

DATE MAILED: 06/17/2003

**DUE: 9-17-03**

Please find below and/or attached an Office communication concerning this application or proceeding.

**RECEIVED**  
BELL, BOYD & LLOYD  
INTELLECTUAL PROPERTY DOCKET

JUN 23 2003

ATTY:

**RMB-TCB**

DOCKET #:

**113190-064**

## Office Action Summary

Application No.

09/865,159

Applicant(s)

Irvin et al.

Examiner

Jennifer Graser

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on RCE & Response, 6/10/03
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 16
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☒ Other: CRF Request letter attached



Art Unit: 1645

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/10/03 has been entered.

### ***New Matter Rejection Overcome***

2. Applicant's verified statement that the changes to the sequence listing and drawing recited in the Amendment filed 8/19/02, Paper No. 11B, were of a clerical nature and/or a typographical nature on page 1 of that amendment and the verified statement in the Response submitted 6/10/03, Paper No. 15, that Applicants were in possession of this subject matter at the time of filing as the C-terminal region of the PAO pilin peptide was well-documented and known in the art at the time the invention was made sufficiently overcomes the former new matter rejection. This region of the polypeptide would remain intact and not be modified as the N-terminal portion. See Applicants' response of 6/10/03, Paper No. 15, for further support.

### ***New CFR MUST be submitted:***

3. Applicants have only submitted changes to the paper sequence listing. However, the electronic copy of the sequence listing must also be corrected. Applicant **must** submit a new

Art Unit: 1645

corrected electronic form/CRF to include the changes which includes the same changes which are being made to the paper listing.

APPLICANT IS GIVEN THE SAME TIME PERIOD FROM THE DATE OF THIS LETTER WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 C.F.R. 1.821-25. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 C.F.R. 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. 1.136. In no case may an applicant extend the period for response beyond the six month statutory period. Direct the response to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the response.

*Allowable Subject Matter*

3. Claim 20 is allowed; however, a new CRF must be submitted in order for the application to be allowed.

4. Correspondence regarding this application should be directed to Group Art Unit 1641. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 1641 Fax number is (703) 308-4242 which is able to receive transmissions 24 hours/day, 7 days/week.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Graser whose telephone number is (703) 308-1742. The examiner can normally be reached on Monday-Friday from 7:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached on (703) 308-3909.

Application/Control Number: 09/865,159

Page 4

Art Unit: 1645

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

*J Graser*  
JENNIFER E. GRASER  
PRIMARY EXAMINER

6/16/07

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 CFR 1.821 - 1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).

☒ 7. A new CRF must be submitted which includes the amendments.  
Other:

**Applicant must provide:**

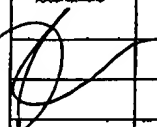
- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing"
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d)

For questions regarding compliance with these requirements, please contact:

For Rules Interpretation, call (703) 308-1123  
For CRF submission help, call (703) 308-4212  
For PatentIn software help, call (703) 557-0400

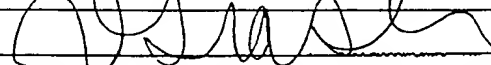
Please return a copy of this notice with your response.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)  PTO Form 1449	Atty Docket No. 113190-064	Application No. 09/865,159
	Applicant Irvin et al.	
	Filing Date 05-24-01	Group 1645

U.S. PATENT DOCUMENTS							
Examiner's Initials		Document Number	Publication Date	Inventor	Class	Subclass	Filing Date If Appropriate
		5,468,484	11-21-95	Hodges et al.			

FOREIGN PATENT DOCUMENTS								
Examiner's Initials		Document Number	Publication Date	Country	Class	Subclass	Translation	
							Yes	No
					:			
					:			
					:			
					:			
					:			
					:			
					:			
					:			
					:			

Examiner's Initials		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner: 	Date Considered: 6/10/03
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	